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8/85

**BC Geological Survey
Assessment Report
13066**

Prospecting

ASSESSMENT REPORT

on the

BEAR PROPERTY

New Westminster Mining Division - British Columbia

Lat. 121° 15' ¹⁴ W.

Long. 49° 11' N.

N.T.S. 92H/3

for

SUECON DEVELOPMENT CORPORATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

by **13,066**

Donald G. Allen, P. Eng. (B. C.)

November 26, 1984

Vancouver, B. C.

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SUMMARY

Suecon Development Corporation holds 20 claim units, BEAR 1 to 4 (two-post claims) and BEAR II (16 units - modified grid), 26 kilometres southeast of Hope, British Columbia. The property lies in the Cascade Mountains at the headwaters of Sumallo River and is accessible via the Hope-Princeton Highway and logging roads.

The property was formerly held by Allison Pass Mining Ltd. who conducted 576 metres diamond drilling in two holes. This work revealed the presence of widespread low-grade zinc-lead-copper-silver mineralization.

The BEAR property is underlain by greenstone and chert of Hozameen Group (Late Paleozoic age).

The fracture-controlled nature of mineralization on the BEAR property, proximity to a quartz diorite stock of Miocene age, and proximity to the CANAM Copper deposit, 16 kilometres to the east (18 million tons grading 0.8% Cu in a breccia pipe), indicate that the BEAR prospect may be related to a number of base metal, precious metal and porphyry copper and molybdenum deposits of Miocene age that occur throughout the Cascade Mountains of B. C. and Washington. A program of geological mapping, geochemical sampling and diamond drilling is recommended to evaluate the property.

CONCLUSION

The occurrence of widespread mineralized float on the BEAR claims, nature of mineralization, proximity to CANAM Copper, all suggest excellent exploration potential. An exploration program is warranted to evaluate the property.

RECOMMENDATION

A three-stage program of surface exploration and diamond drilling is recommended to evaluate the BEAR property. Stage I will consist of geological mapping, prospecting and geochemical sampling on and around the claim block. Additional claims should be staked prior to this work. Should results of Stage I be favourable, then Stage II and III programs of preliminary and follow up drilling are recommended. Estimated costs of Stages I, II, and III are \$20,000, \$30,000, and \$43,000, respectively, for a grand total of \$93,000.

Donald G. Allen

INTRODUCTION

SUECON DEVELOPMENT CORPORATION holds 20 four claim units, BEAR I to 4 and BEAR II, in the Hope-Princeton area of southwestern British Columbia. The claims cover lead-zinc-copper-silver-gold mineralization in fractured volcanic rocks of the Late Paleozoic Hozameen Group.

This report summarizes results of a geological mapping and sampling property examination carried out by the writer on July 18, 1983 and August 27, 1984.

LOCATION, ACCESS, PHYSIOGRAPHY

The BEAR property is situated 26 kilometres southeast of Hope, British Columbia (Figure 1), on the west fork of the headwaters of Sumallo River. It lies in the Cascade Mountains between elevations 3,700 and 5,000 feet. Topography in the area ranges from precipitous on mountain slopes to gentle on the valley bottom. Lower valley slopes have been logged in recent years and are covered with logging debris and a young growth of hemlock, cedar and slide alder.

Access is via the Hope-Princeton Highway to Sumallo River and thence by logging roads up the Sumallo River valley (figure 2).

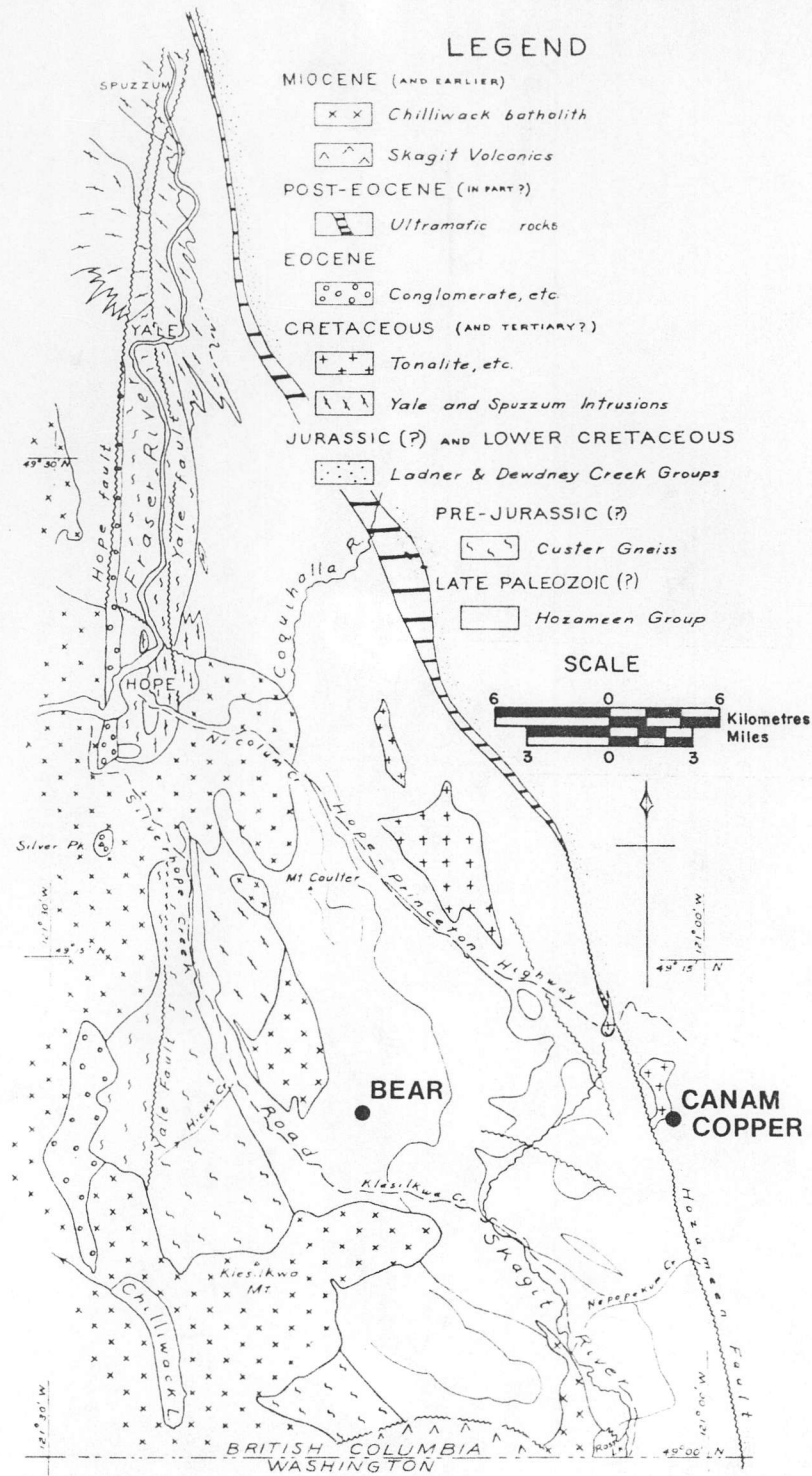


Figure 1. Location and regional geology map (geology after McTaggart and Thompson, 1967)

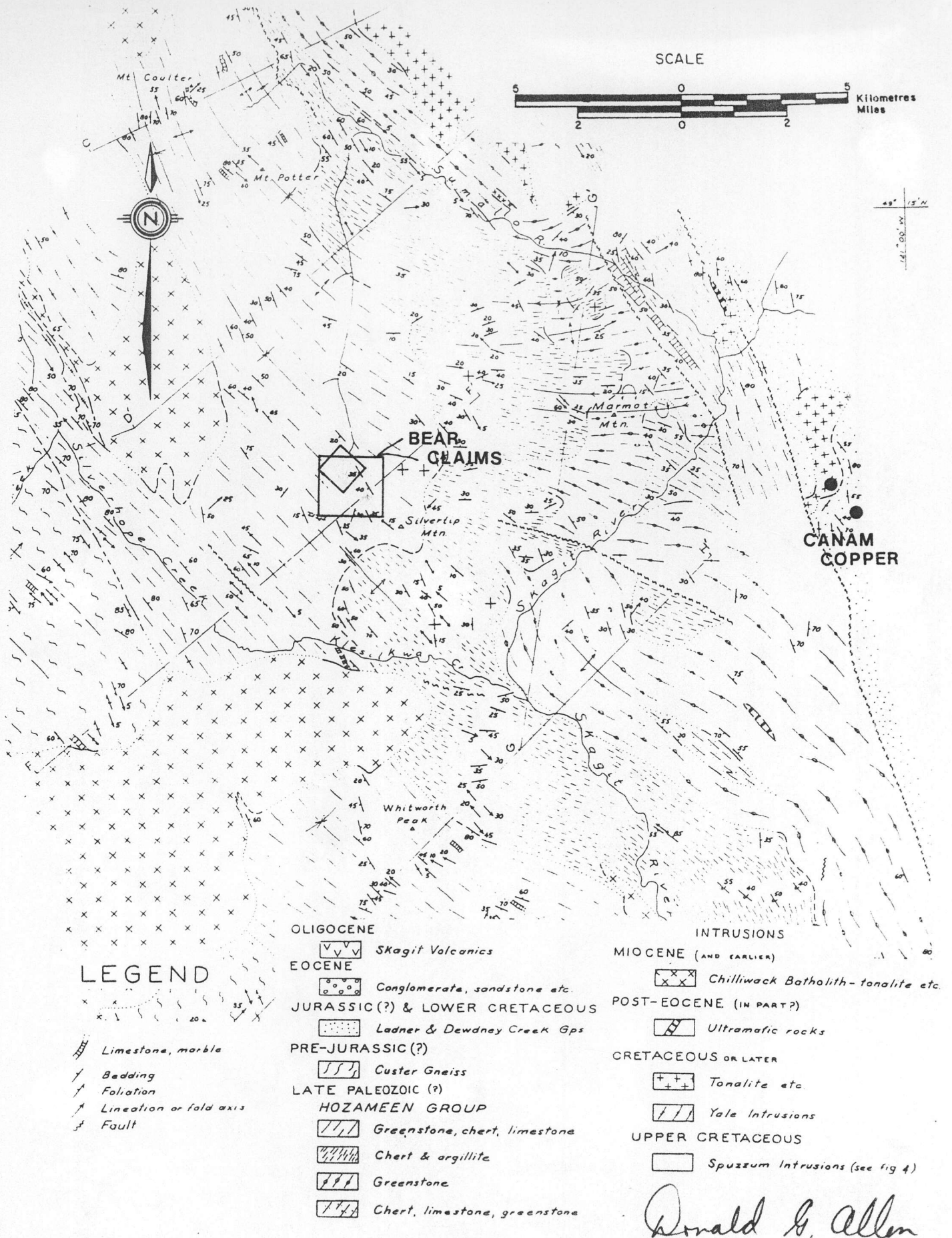


Figure 2. Geological map of area southeast of Hope (geology after McTaggart and Thompson, 1967)

CLAIMS

The Bear property comprises four two-post claims and one 16 unit modified grid claim as follows:

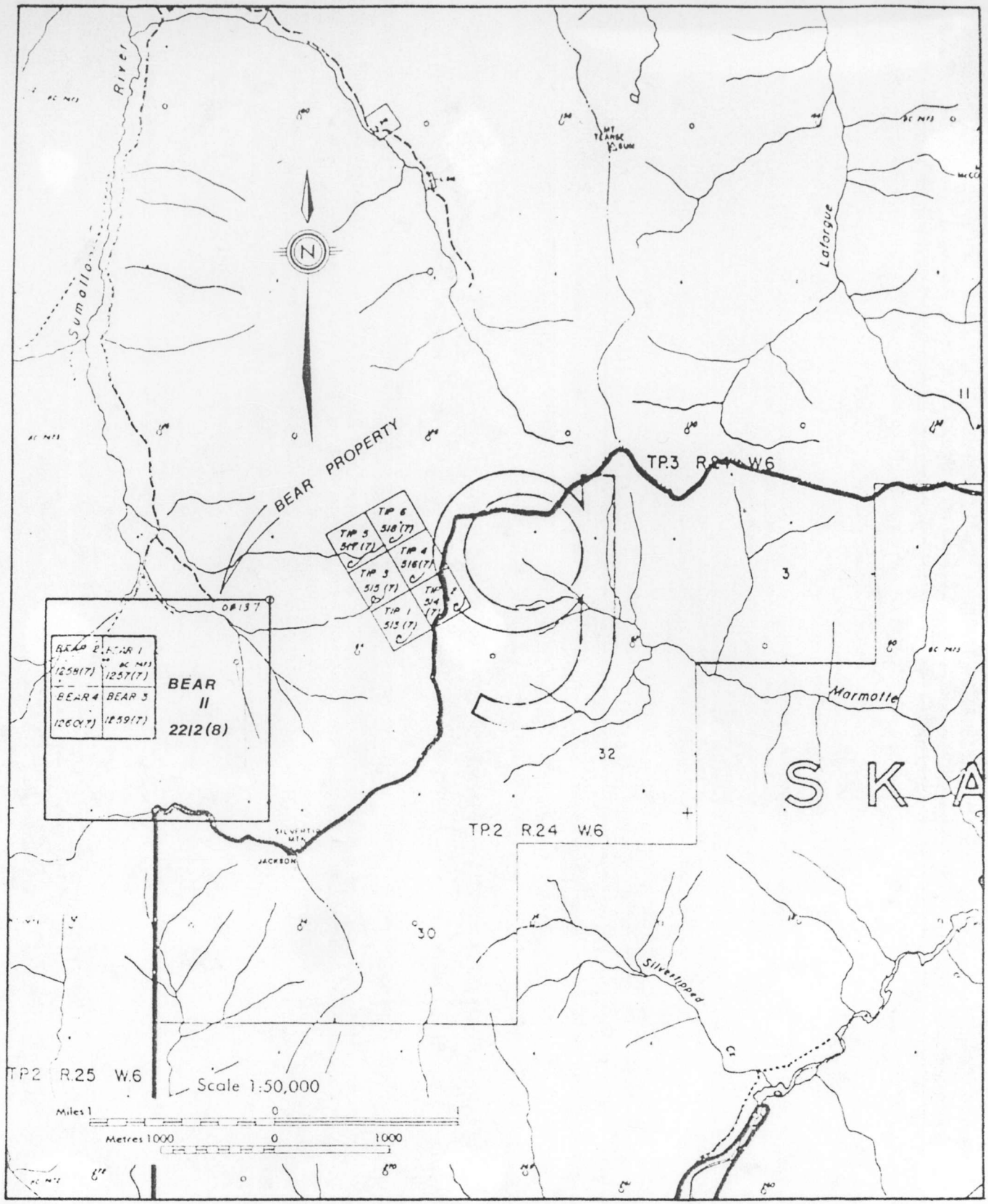
<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Bear 1	1257	July 13, 1985
Bear 2	1258	July 13, 1985
Bear 3	1259	July 13, 1985
Bear 4	1260	July 13, 1985
Bear II	2212	August 24, 1985*

Claim boundaries of the Bear 1 to 4 as shown on Figure 3, taken from Ministry of Mines claim map 92H/3E, are not accurate. The actual positions are plotted on Figure 5.

HISTORY

The BEAR prospect was previously held by Allison Pass Mining Ltd. who, in 1965 and 1966, conducted a program of road construction and diamond drilling totalling 576 metres in two holes. There is no record of this work in Ministry of Mines Assessment files but the work is reported in a company prospectus (Myers, 1966).

* Assuming this report is accepted for assessment purposes.



SUECON DEVELOPMENT CORPORATION

N.T.S. 92 H/3E

CLAIM MAP

BEAR CLAIMS

New Westminster Mining Division - British Columbia

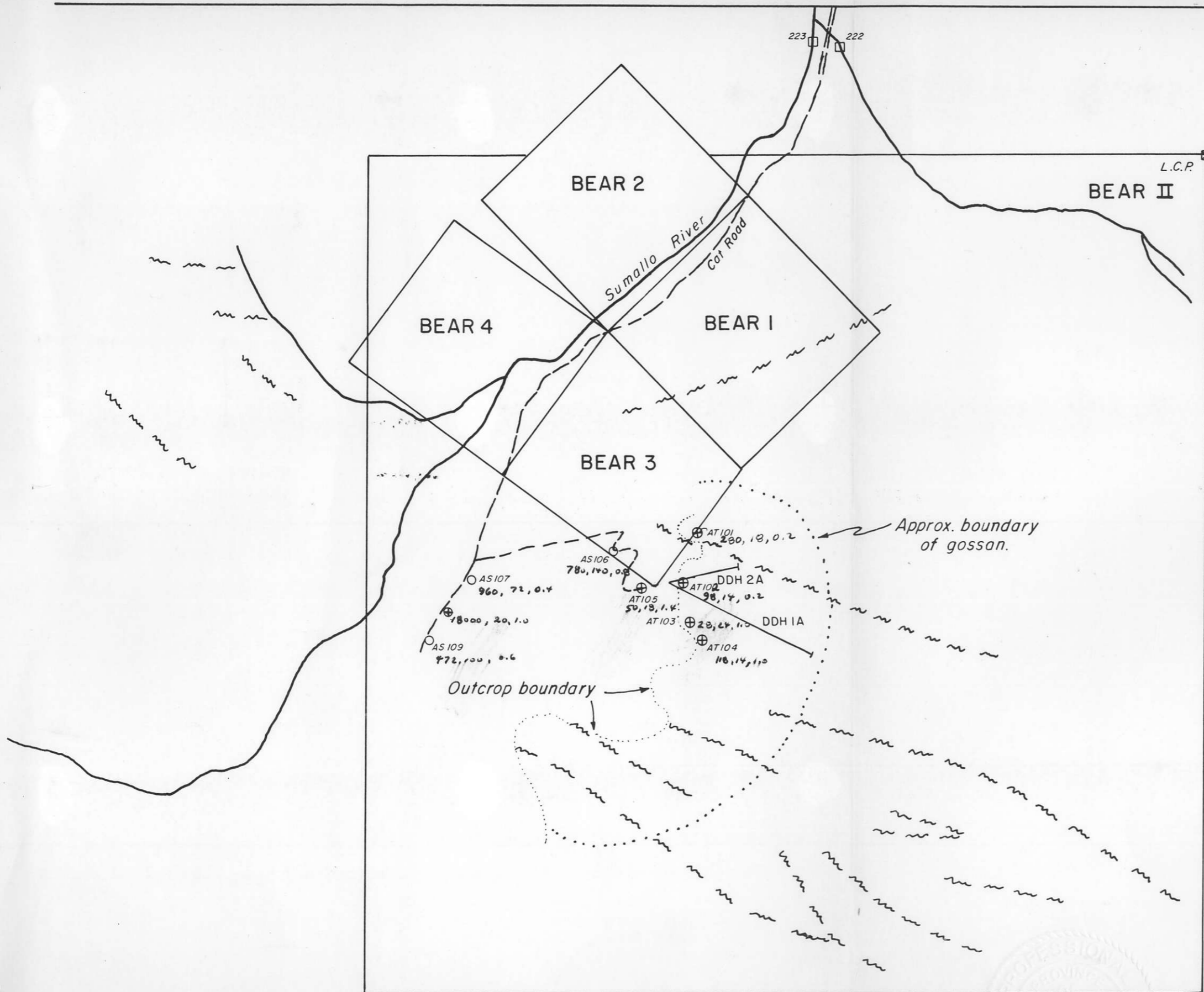
Donald J. Allen
A.M. exploration Ltd

Figure 3

Regional Geology

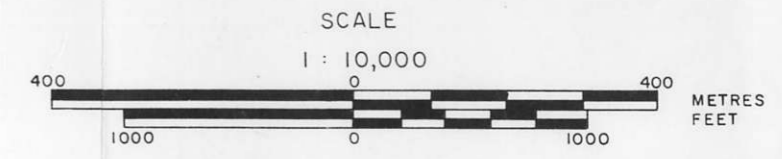
The BEAR claims are situated in the Hope area (92H west), the geology of which has been summarized by Monger (1970). The geology of the Cascade Range immediately to the north and southeast of Hope has been described by McTaggart and Thompson (1967) as follows (see Figures 1 and 4):

"The late Paleozoic (?) Hozameen Group consists of four divisions composed of various proportions of ribbon chert, basic lavas (now greenstones), limestone, and argillite, totalling at least 20,000 ft in thickness. In late Paleozoic or Triassic time, these rocks were metamorphosed to form the Custer Gneiss, a high-grade migmatitic complex of layered gneiss and schist. A second episode of high-grade regional metamorphism in Late Cretaceous time is associated with the emplacement of the Spuzzum Intrusions. This was followed by the Yale Intrusions (mainly foliated granodiorite), deposition of Eocene conglomerate and sandstone, and intrusion of Chilliwack batholithic rocks (mainly tonalite), which are partly of Miocene age. Several periods of deformation, some associated with the orogenies mentioned above, produced fold axes trending northwest, northeast, and northerly. The area contains three main fault zones. One separates the Custer Gneiss from its overlying cover of Hozameen rocks. A second, the Hozameen fault, separates the Hozameen



LEGEND

- ⊕ AT 101 280, 13, 0.2 Rock chip sample, sample number, ppm Zn, Pb, Ag.
- AS 107 960, 72, 0.4 Soil sample site, sample number, ppm Zn, Pb, Ag.
- 222 Silt sample site, sample number, ppm Zn, Pb, Ag.
- Claim boundary
- ~ Air photo lineament and/or fault.



SUECON DEVELOPMENT CORPORATION
BEAR PROPERTY
 NEW WESTMINSTER MINING DIVISION - BRITISH COLUMBIA

**CLAIMS, SAMPLE SITES
 & DRILL HOLES**

Donald Ballin
A.M. exploration Ltd

Figure 5

beds from Mesozoic formations to the east and contains the 'serpentine belt'. The third, the Fraser River fault zone, is represented by the Hope and Yale faults."

Plutonism of Miocene to Oligocene age was accompanied by extensive vulcanism (Skagit formation, figure 4) and mineralization in the Cascade Range. A number of important base, precious metal, and porphyry copper and molybdenum deposits in B. C. and Washington State are associated with these young rocks including the CANAM copper and Clear Creek molybdenum deposits. The CANAM copper deposit, a breccia pipe mineralized with copper and minor amounts of gold, silver, tungsten and uranium, lies 16 kilometres to the east of the BEAR property.

Property Geology and Mineralization

According to McTaggart and Thompson (1967), the headwaters of the Sumallo River are underlain by greenstone, chert and limestone of the Hozameen Group (figure 4). Bedding in these units strike northwesterly and dip moderately to the southwest. A quartz diorite stock of Miocene age outcrops four kilometres to the west. Rock types observed by the writer in the claim area include light green greenstone, tuff and chert. Fractured greenstone containing veinlets of pyrrhotite with or without quartz tremolite, sphalerite, and chalcopyrite were observed in float and outcrop over a wide area. Also observed in float was a 1-2 cm wide quartz vein containing galena, sphalerite and minor

amounts of chalcopyrite and pyrrhotite-sphalerite veins up to 10 metres wide.

The fracture controlled nature of mineralization on the BEAR claims suggests a comparison with the widespread mineralized fractures and breccias on the CANAM copper property (White, 1949; Bacon, 1954; Eastwood, 1965).

RESULTS OF PREVIOUS WORK

The results of Diamond drilling carried out by Allison Pass Mines were summarized by Myers (1966) as follows:

1. The large amount of alteration and mineralization encountered in most of the core from both holes is considered very significant. Although the greater portion of mineralization was in the form of iron sulphides some lead, zinc, silver and copper was present in all assays run. From the surface to 845 feet in Hole 1A there was no visible mineral of either lead or zinc, yet on assays up to 0.60 lead and 0.25 zinc were obtained. On Sample No. 9, where 0.60 lead and 0.25 zinc was obtained, the sample was taken over 6.5 feet of core. In most instances higher values of lead and zinc were obtained in the assay where a larger interval of the core was cut for assay.
2. In diamond drill Hole 1A from 847 feet to 1297 feet, several small veinlets or fractures filled with coarse crystalline galena, sphalerite and calcite were noted. These fractures or veinlets did not appear to be very wide, but only in one instance were both sides of the veinlet or fracture recovered in the core. In the other areas only one side of the wall of the veinlet was recovered in the core. It is very possible that the veinlets or fractures could be several inches wide and the softer, more crystalline mineral, ground up and lost. Core recovery was good, but in a 25 foot interval up to 2½ feet of core could be missing and represent the softer fracture filling lead, silver and zinc minerals. Sample No. 21 was taken over an 8-foot interval in which two small veinlets or fractures were represented, however, only a ¼ inch of coarse crystalline mineral was observed on the wall of the fracture. This sample ran 0.60% lead; 0.93% zinc and 0.05% copper. At present day prices this would give approximately \$7.86 value per ton. It is felt that this would be a minimum value in the core since part of the mineral in the veinlets may not have been recovered. A small interval Sample No. 20, of core containing silicified limestone and chert, with thin laminations or bands of possible fine crystalline metallic minerals, ran 0.20% zinc and a trace of lead. This type of rock with bands or layers up to 1½ feet thick makes up a good portion of the rock between 847' and 1297' in Hole 1A. It is very possible that some bands also carry lead in finely crystalline form in the darker colour layers mentioned earlier. A semi-quantitative spectroscopic analysis of similar material at 1152" (Sample No. 12) did show 0.03 lead.

The presence of coarsely crystalline lead and zinc minerals in fracture fillings along with calcite over a 450 foot interval of Hole 1A from 847' to 1297', is considered very significant and well worth further drilling in an effort to probe the possible extent and obtain more definite value in the zone. This zone in the hole is some 900 feet below the surface show and the fracture filling material is identical to that on the surface. An assay of the actual material in the veinlets or fractures would assay in values very similar to the average of two samples from the surface show, which averaged 0.08 gold; 8.5 silver; 9.26% zinc; 17.83% lead; and 0.72% copper. With this vertical distance and the width indicated in the core of some 450 feet and a width of 100 feet on the surface and a length of 800 feet on the surface, several million tons of possible commercial ore could be present in this one area. If only 1/3 of this zone proved commercial ore, it would amount to approximately 4 million tons.

3. The zinc showings in diamond drill Hole 2A from 417' to 459' are very significant. In this interval there appears to be a zone some 25 feet wide averaging some 2.5% zinc. This showing is separate from the main zone to the southeast and is associated with a cross fracture or fault to the east of the drill station. Zinc showings can be traced for over 600' on the surface along the fault zone. Very little or no lead is present in the surface showings or in the core which penetrates the zone some 300 feet below the surface. Additional drilling should be done in this area to probe the zone at greater depths and outline the extent of the possible showings so far indicated. From the data obtained to date from the surface shows and the results of Hole 2A, there could be a sizeable ore body of zinc along this cross structure east of the lead, zinc and silver show. The present indicated dimension of 600 feet long, 25 feet wide and 300 feet thick would give a possible 300,000 tons of ore averaging 2.5% zinc.

RESULTS OF RECENT WORK

The Bear property was examined by the writer on August 22, 1984. Purpose of this work was to carry out additional mapping and sampling and to locate the site of previous drilling carried out by Allison Pass Mines. Although the drill sites were located, no drill core could be found in the vicinity.

A total of nine rock and soil samples were collected from the vicinity of the drill site area and along the bulldozer trail. Rock descriptions are presented in Table 1 and the sites and selected analytical results plotted on Figure 5. Analytical results are included in Appendix I. Soil material sampled consisted of talus fines taken at depths of 30 to 40 cm along road cuts. Samples were analyzed for molybdenum, copper, silver, zinc, lead, and gold, by standard atomic absorption methods.

The most significant results are as follows:

1. Anomalous zinc (470-960 ppm), copper (94-530 ppm), and lead (72-140 ppm) values were obtained in all soil samples (S 106, 107, 109).
2. Soil sample 106 also contained anomalous lead and gold values.
3. Copper values are moderately to highly anomalous in all rock samples.

EXPLORATION POTENTIAL

Widespread zinc-lead mineralization and anomalous geochemical results from both the east and west tributaries of Sumallo River (see Allen, 1985) suggest good exploration potential. Target types are mineralized breccia pipes of the CANAM type and/or vein type base metal deposits with associated precious metals.

Donald G. Allen

TABLE IRock Descriptions

<u>Sample No.</u>	<u>Description</u>
240 AT 101	Silicified andesite-dacite with abundant pyrrhotite, disseminated, on fractures and in seams.
102	As above - taken across 7 metres.
103	Quartz vein float - rusty, weathered and containing wollastonite.
104	Greenish grey tuff with abundant pyrite, disseminated and in irregular seams.
105	Silicified volcanic? float containing 0.2-5 cm quartz-carbonate veins - some copper staining.
108	Light green tuff - with pyrrhotite - sphalerite veins up to 10 cm wide.

REFERENCES

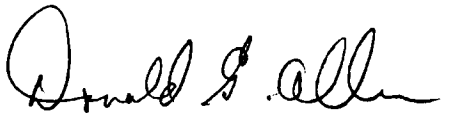
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- Bacon, W. R. (1954). A. M. in B.C. Dept. of Mines Annual Report for 1954, pp. A152-159.
- Eastwood, G. E. P. (1965). A. M. and Invermay, in B.C. Dept. of Mines Annual Report for 1965, pp. 206-213.
- McTaggart, H. C. and Thompson, R. M. (1967). Geology of Part of The Northern Cascades in Southern British Columbia. Canadian Journal of Earth Sciences, Vol. 4, pp. 1199-1228.
- Monger, J. W. H. (1970). Hope Map Area, West Half, B.C. Geological Survey of Canada, Paper 69-47.
- Myers, W. H. (1966). Geological Report of the Diamond Drilling on Sumallo Basin Property in Prospectus for Allison Pass Mining Ltd. dated August, 1966.
- White, W. H. (1949). A. M. in B.C. Dept. of Mines Annual Report for 1949, pp. A210-213.

CERTIFICATE

I, Donald G. Allen, certify that:

1. I am a Consulting Geological Engineer of A & M Exploration Ltd., with offices at #214 - 850 West Hastings Street, Vancouver, British Columbia, V6C 1E1
2. I am a graduate of the University of British Columbia with degrees in Geological Engineering (B.A.Sc., 1964; M.A.Sc., 1966).
3. I have been practising my profession of exploration geologist since 1964 to the present in British Columbia, the Yukon, Alaska and various parts of the Western United States.
4. I am a member in good standing of the Association of Professional Engineers of British Columbia.
5. This report is based upon a property examination carried out personally on July 18, 1983 and August 22, 1984, and upon information listed under References.
6. I hold no interest, nor do I expect to receive any, in the BEAR claims or in Suecon Development Corporation.
7. I consent to the use of this report in a Statement of Material Facts or in a Prospectus in connection with raising of funds for the project covered by this report.

November 26, 1984
Vancouver, B. C.


Donald G. Allen,
P. Eng. (B. C.)

APPENDIX I
ANALYTICAL RESULTS

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

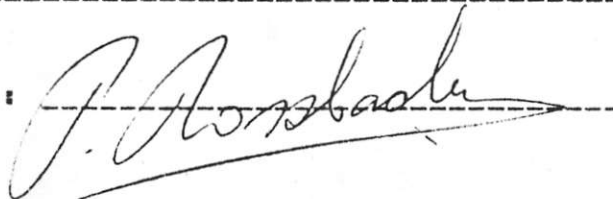
A&M EXPLORATION LTD.
214-850 W. HASTINGS ST.
VANCOUVER, B.C.

CERTIFICATE No.: 84343 - 1
INVOICE No.: 5098
DATE ANALYSED: NOV. 23, 1984
FILE NAME: A&M343

PROJECT No.: 84-240

SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au
240 AT 101	1	58	0.2	280	18	
102	1	96	0.2	98	14	
103	1	130	1.0	28	24	
104	1	114	0.2	118	14	
105	1	700	1.4	50	18	
AS 106	3	112	0.8	780	140	250
107	2	162	0.4	960	72	10
AT 108	1	530	1.0	18000	20	
AS 109	2	94	0.6	472	100	10

CERTIFIED BY :



APPENDIX II
AFFIDAVIT OF EXPENSES

AFFIDAVIT OF EXPENSES

This will certify that geological mapping and geo-chemical sampling was carried out on August 22, 1984 on the BEAR 1 to 4 and BEAR II claims, Sumallo River area, New Westminster Mining Division, British Columbia, to the value of the following:

Mobilization and fieldwork

Engineering Fees

D. G. Allen \$ 400.00

Geochemical Analyses 100.91

Board 12.90

Vehicle expense and rental 115.00

Report Preparation

D. G. Allen 800.00

Maps, photocopying

Typing, draughting, compilation
15 hours @ \$18.50 277.50

TOTAL \$1,706.31

Donald G. Allen